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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/054,564 04/03/98 SIMPSON

J

EXAMINER

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ART UNIT

PAPER NUMBER

3724

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12/10/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/054,564	Applicant(s) Jack R. Simpson
Examiner Gyounghyun Bae	Group Art Unit 3724

- Responsive to communication(s) filed on _____.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- Claim(s) 1-44 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 1-44 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claims _____ are subject to restriction or election requirement.

Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on _____ is/are objected to by the Examiner.
- The proposed drawing correction, filed on _____ is approved disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All Some* None of the CERTIFIED copies of the priority documents have been received.
- received in Application No. (Series Code/Serial Number) _____.
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21, 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, and line 2, "to the be" should be --to be--.

In claim 1, and line 9, "the angled surface" lacks positive antecedent basis.

- In claim 2, and line 2, "the trim blade" and "the angled stripper surface" lack positive antecedent basis.

In claim 6, and line 3, "the stripper" lacks positive antecedent basis.

- In claim 10, and lines 1 and 2, "both trailing and leading trim blades" lacks positive antecedent basis in the specification referring the lines 3-4 in page 20 and Fig. 10.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Smithwick, Jr. et al.

Smithwick, Jr. et al discloses the same invention for a rotary cutting die shown in Fig. 1 for cutting corrugated board, taught in the lines 15 of column 1, including a base 110 adapted to be mounted to a rotary cylinder 102, at least one trim cutting blade 112 secured to the base 110 and extending outwardly therefrom, shown in Fig. 1 and 2 for trimming scrap from a sheet of corrugated board taught in the lines 13-15 of column 1; and at least one trim stripper 10 shown in Fig. 4 secured to the base 110 adjacent the trim blade 112 and projecting outwardly from the base, shown in Fig. 2 for stripping trim cut from the sheet of corrugated board, taught in the lines 13-15 of column 1, the trim stripper 10 shown in Fig. 4 including an angled outer stripper surface 20 that is angled outwardly and away from the trim blade 112 in such a fashion that at least a portion of the angled surface 20 extends outwardly, shown in Fig 2 past the height of the trim blade 112 ; an edge 20 that normally faces the trim blade 112, and wherein the angled stripper surface 22 and the edge 20 facing the trim blade 112 form an angle greater than 90 degrees shown in Fig. 3; the cutting die 102 adapted to work in conjunction with a rotary anvil 104 to trim a corrugated sheet taught in the lines 13-15 of column 1 passing through a nip area shown in Fig. 1 formed between the rotating cutting blade 112 and anvil 104 and wherein the angled outer surface 20 of the trim stripper 10 acts to engage a leading edge of the corrugated

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board sheet, inherently taught in the lines 13-15 of column 1 as it enters the nip area shown in Fig. 1 and further the outer angled surface 20 of the trim stripper 10 contacts and holds one or more cut pieces of trim scrap shown in Fig. 9 against the anvil 104 as the trim scrap exits the nip shown in Fig. 1 so as to cause the trim scrap to be directed generally downwardly inherently shown in Fig. 1 by the anvil 104 as the anvil transfers the cut trim scrap away from the nip area inherently shown in Fig. 1; the edge 22 of the trim stripper 10 that normally faces the trim blade 112 includes an upper beveled filler region 18 that normally lies adjacent an upper beveled portion of the trim blade 112 shown in Fig. 2 such that the trim stripper 10 may assure a flush mounted position adjacent the trim blade shown in Fig. 2; the trim stripper 10 is constructed of a closed cell rubber taught in the lines 27-31 of column 1 having a durometer of approximately 30-60 inherently taught in the lines 27-31 of column 1; the cutting die shown in Fig. 2 adapted to rotate in a given direction inherently shown in Fig. 1 and outer angled surface 20 of the trim stripper 10 intersects with an edge 22 of the stripper 10 that normally faces the trim blade 112 to form an angle greater than 90 degrees shown in Fig. 2 and explained in a previous claim and wherein the upper surface 20 of the stripper 10 is angled such that it extends from the intersection with the edge outwardly shown in Fig. 2 w.r.t. the base 110 in the general direction that the cutting die 108 is adapted to rotate such that the angled upper surface 24 from the surface 20 and 22 of the stripper 10 leads the adjacent trim blade 112; the angled upper surface 24 of the trim stripper 10 includes a leading portion 22 and 24 that extends outwardly shown in Fig. 2 past the height of the trim blade 112 shown in Fig. 2 and a trailing portion 20 that assumes a height that is

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approximately the height of the trim blade 112 shown in Fig. 2; the stripper 10 includes two separate angled upper surfaces 20, 22 and 24 that enable the trim stripper 10 to be reversed shown in Figs. 1 and 2; two angled upper surfaces 20, 22 and 24 form an apex shown in Fig. 2 between 20 and 24 that forms a demarcation between the respective upper surfaces shown in Fig. 2; both trailing 22 and 24 and leading 20 trim edges and wherein at least one trim stripper 10 is disposed adjacent the trailing trim edge 22 and 24 and the leading trim blade 20; the outer stripper surface 20 and 22 of each trim stripper 10 is angled outwardly and away shown in Fig. 2 from the adjacent trim blade 112; the trim stripper 10 includes a flexible trim deflector 16; the trim deflector 16 is spaced from and leads the trim cutting blade 112 shown in Fig. 5; the trim deflector 16 assumes the shape of a flexible finger 16; the trim stripper 10 includes a main body portion: the top half portion in Fig. 4 and wherein the flexible finger 16 extends outwardly from the main body portion shown in Fig. 4; the finger 16 is relatively thin compared to its transverse width shown in Fig. 3; the angled portion 20, 22 and 24 of the trim stripper 10 includes a trailing portion 22 and 24 disposed adjacent the trim blade 112 and a leading portion 20 spaced forwardly of the trim blade 112 and wherein there is provided a trim deflector 16 that is disposed adjacent the leading portion 20 of the angled surface 20, 22, and 24 and projects outwardly therefrom shown I Fig. 3 past the height of the trim blade 112 shown in Fig. 2; the flexible finger 16 extends transversely across the main body portion shown in Fig. 3 the top half portion of the trim stripper 10; a main body portion, the top half portion shown in Fig. 3 , and wherein the flexible finger 16 projects outwardly from the main body portion the top half portion shown in Fig. 3; and wherein the main

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body portion the top half portion shown in Fig. 3 includes a leading edge 20 and a trailing edge 22 and 24, the trailing edge 22 and 24 being disposed adjacent the trim blade 112; and wherein the flexible finger 16 projects from the main body portion, the top half portion shown in Fig. 3, at a point adjacent the leading edge 20 of the main body portion, the top half portion shown in Fig. 3, of the trim stripper 10; the cutting die 110 is operative to cooperate with an anvil 104 to trim a sheet of corrugated board, taught in the lines 13-15 of column 1, passing through a nip area shown in Fig. 1 defined between the cutting die 110 and the anvil 104 and wherein the trim stripper 10 includes a flexible finger 16 that in a non-compressed position extends outwardly past the trim blade 112 and wherein the flexible finger 16, and wherein the flexible finger 16 functions to curl, shown in Fig. 5, around a portion of a piece of cut trim die 110 as the flexible finger 16 and cut trim die 110 pass through the nip shown in Fig. 1 defined between the cutting die 110 and the anvil 104; the length of the flexible finger 16 is such that in a compressed position, it generally overlies a top portion of the trim stripper 10 and includes a terminal end shown in Fig. 2 that terminates short of the trim blade 112; a base 110; at least one trim cutting blade 112 secured to the base 110 and extending outwardly, shown in Fig. 2 therefrom for trimming scrap from a sheet of corrugated board, taught in the lines 13-15 of column 1; and at least one trim stripper 10 secured to the base 110 adjacent the trim blade 112 and projecting outwardly from the base shown in Fig. 2 for stripping trim cut from the sheet of corrugated board, taught in the lines 13-15 of column 1, the trim stripper 10 including a body portion, the top half portion shown in Fig. 3, and a flexible deflector 16 projecting outwardly from the body portion shown in Fig. 2 for

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engaging cut trim and generally assisting in controlling the movement of cut trim after it has been cut by the cutting die inherently shown in Figs. 1 and 2; the trim deflector 16 is spaced from, shown in Fig. 2, and leads the trim cutting blade 112; the deflector 16 assumes the shape of a flexible finger that extends outwardly from the body portion, the top half portion shown in Fig. 3, of the trim stripper 10; the flexible finger 16 extends transversely across the body portion, the top half portion shown in Fig. 3, of the trim stripper 10 and extends outwardly past the height of the trim cutting blade shown in Fig. 1; the finger 16 is relatively thin compared to its transverse width, shown in Fig. 3; the body portion, the top half portion shown in Fig. 3, of the trim stripper 10 includes an angled outer stripper surface 20, 22, and 24 that is angled outwardly and away, shown in Fig. 2 from the trim blade 112 in such a fashion that at least a portion of the angled surface 20, 22 and 24 extends outwardly past the height of the trim blade 112, and wherein the angled surface 20, 22 and 24 of the trim stripper 10 includes a trailing portion 22 and 24 disposed adjacent the trim blade 112 and a leading portion 20 spaced forwardly of the trim blade 112 and wherein the trim deflector 16 is disposed closer to the leading portion 20 of the angled surface 20 and 22 than the trailing portion 22 of the angled surface 20 and 22; a method comprising directing the sheet of corrugated board, inherently shown in Fig. 1, between the rotary cutting die 108 and rotating anvil 104 ; engaging a trim edge portion of the sheet, inherently shown in Fig. 1 with an angled outer surface 22 and 24 of a trim stripper 10 carried by the cutting die 110 and disposed adjacent a trim blade 112; cutting the trim edge portion for the corrugated board sheet, taught in the lines 13-15 of column 1, with the trim blade 112 while compressing the trim stripper 10 between the

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cutting die 108 and the trim edge portion 20, 22 and 24 being cut as the corrugated board passes, taught in the lines 13-15 of column 1, between the cutting die 110 and the anvil 104; and releasing the trim stripper 10 as the trim stripper 10 and cut trim edge portion 20, 22 and 24 pass through a nip shown in Fig. 1 defined between the anvil 104 and the cutting die 110 causing the angled outer surface 20, 22 and of the trim stripper 10 to extend outwardly shown in Fig. 1 and engage the cut trim edge portion 20, 22 and 24 and strip the cut trim edge portion 20, 22 and 24 from the trim blade 112; a leading edge 20 and wherein the method includes directing the leading edge 20 of the sheet of corrugated board, taught in the lines 13-15 of column 1 into contact with the angled outer surface of the trim stripper 10; engaging the cut trim, inherently shown in Fig. 1, with a flexible deflector 16 that forms a part of the trim stripper 10; engaging the cut trim, inherently shown in Fig. 1, with a back side of the deflector 16 and effectively limiting the outward movement, shown in Fig. 5, of the cut trim as it exits the nip, shown in Fig. 1, between the cutting die 110 and the anvil 104; curling, shown in Fig. 5, the flexible deflector 16 around the cut trim portion, inherently shown in Figs. 1 and 5, as the trim stripper 10 and cut trim portion pass through the nip, inherently shown in Fig. 1; the flexible deflector 16 projects downwardly from the cutting die 110 and as the deflector 16 and the cut trim portion, inherently shown in Fig. 1, exit the nip inherently shown in Fig. 1, the deflector 16 engages the cut trim portion, inherently shown in Fig. 1, and deflects the same downwardly, inherently shown in Fig. 1; an elongated finger 16 that projects from a main body portion, shown in Fig. 3, of the trim stripper 10 and wherein as the finger 16 passes through the nip, inherently shown in Fig. 1, it tends to curl back,

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shown in Fig. 5, and around a cut trim portion, inherently shown in Fig. 1, causing the cut trim portion, inherently shown in Fig. 1, to be held between the curled finger 16 and the main body portion of the trim stripper 10; the finger 16 is of a selected length shown in Fig. 3 such that when the finger 16 curls back, shown in Fig. 5, it does not extend substantially past the main body portion of the trim stripper 10; a base 110; at least one trim blade 112 for cutting trim scrap, inherently shown in Fig. 1 and taught in the lines 13-15 of column 1, from the corrugated board taught in the lines 13-15 of column 1; at least one resilient trim stripper 10 mounted on the base 110 adjacent the trim blade 112 for stripping trim scrap, taught in the lines 13-15 of column 1, from the trim board, taught in the lines 13-15 of column 1; and the trim stripper 10 including a body portion shown in Fig. 3 and a finger 16 projecting outwardly from the body portion for engaging a piece of cut trim inherently taught in the lines 13-15 of column 1; an edge 22 and 24 that normally faces the trim blade 112 and an outer angled trim scrap, inherently taught in the lines 13-15 of column 1, engaging surface that extends from an upper portion, shown in Fig. 3, of the edge 20 outwardly and away from the trim blade 112 such that the angled upper surface 22 and 24, when not compressed, projects outwardly past the trim blade; the angled upper surface 22 and 24 and edge 20 form an angle greater than 90 degrees but less than 180 degrees shown in Fig. 3; the edge 22 and 24 that normally faces the trim blade 112 is secured flush against the trim blade 112 shown in Fig. 2; two distinct angled upper surfaces 20, 22 and 24 that permit the trim stripper 10 to be reversed, inherently shown in Fig. 1; the finger 16 is spaced forwardly of the trim blade 112; the cutting die 110 is adapted to cooperate with an anvil 104 and wherein a nip, inherently

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shown in Fig. 1, is defined between the cutting die 110 and the anvil 104, and wherein the finger 16 is elongated and includes a terminal end, shown in Fig. 3 that does not project substantially past the main body portion of the trim stripper 10 shown in Fig. 3 when the finger 16 assumes a curled configuration, shown in Fig. 5, as it moves through the nip, inherently shown in Fig. 1; the flexible finger 16 extends over and lies generally adjacent the body portion of the trim stripper 10; the elongated finger 16 may at least partially curl, shown in Fig. 5, around a cut trim portion of the corrugated board, inherently taught in the lines 13-15 of column 1, and thereby control the movement of the cut corrugated trim as it exits the nip, inherently shown in Fig. 1.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crawford, Hunt, Passafiume, Simpson, Gherardi et al, Simpson et al, Elsner et al are cited to show the related device.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Bae whose telephone number is (703) 305-1920. The examiner can normally be reached on Monday through Friday from 8:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada, can be reached on (703) 308-2187. The fax phone number for this Group is (703) 305-3579.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700

gbae
December 3, 1998